USER MANUAL

HD50

720P

1080P

Hands Free Camcorder

Free your hands for more wonderful memories

THE LEADER OF THE WORLD TREND

Hands-free Camera

Wide Optional Accessories for High-difficulty Shooting

170°

Ultra-wide Angle of View

F2.8

Glass Lens

Remote Control with Clip and Strap Interface

Optional Cyclic Recording Function

Touch-key

Auto Continuous Shoot

Voice-activated Recording

720P

High-definition Images

1080P

High-definition Images

True-color TFT Screen

Exquisite Mini TF Card

-30℃

Ultra-low Ambient Temperature

LI-ION BATTERY

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Precautions

1.This DV is a precision product. Please do not drop it or hit it physically.
2.To maximize the operation effect, please use your finger touch the screen.
3.Keep the DV away from any object with a strong magnetic field, like magnet or electromotor, or any object emitting strong radio waves, like antenna,as a strong magnetic field may cause failure to HD50 or cause damage to image and audio data.
4.Do not expose the DV to high temperature or sunlight direct.
5.Keep the Micro SD card away from the strong magnetic field of TV, speaker, or magnet. Do not put it in any place with potential static, or the data stored in it may be lost.
6.If the DV overheats, smokes or smell in charging, please disconnect the power supply immediately to avoid the risk of fire.
7.Put HD50 beyond the reach of any child for charging, as the power cord may cause an accidental suffocation or electric shock to the child.
8.Please keep this product in a cool, dry, and dust-free place.

Preface

Thanks for purchasing our high-definition digital video camera HD50. Featured by small size, integrated design and easy to operate, HD50 can be used to photograph and record the scene anytime anywhere by means of the high-definition and dynamic photography, so that you can share the video recording experiences with your family members and friends .

This Manual specifies how to use and install HD50 and provides detailed information, including the instructions on use, operation and installation as well as the technical specifications. Please read this Manual carefully to understand it before use and keep it well for long-term reference.

Product Certification

As certified by such authoritative organizations as FCC and CE, this product complies with the recommended standards and thus guarantees the user's safety.

Product Overview

As a high-end mini HD digital video camera designed to meet the market demand, this product can perform functions such as high-definition digital photography, voice storage, real-time display, voice-activated video recording, photo shooting, time display, remote control, digital zoom, touch keypad, high-speed USB data transmission, and USB charging. Supplemented by the accessories, this product integrating multiple patented technologies can be used to photograph anything anytime anywhere.

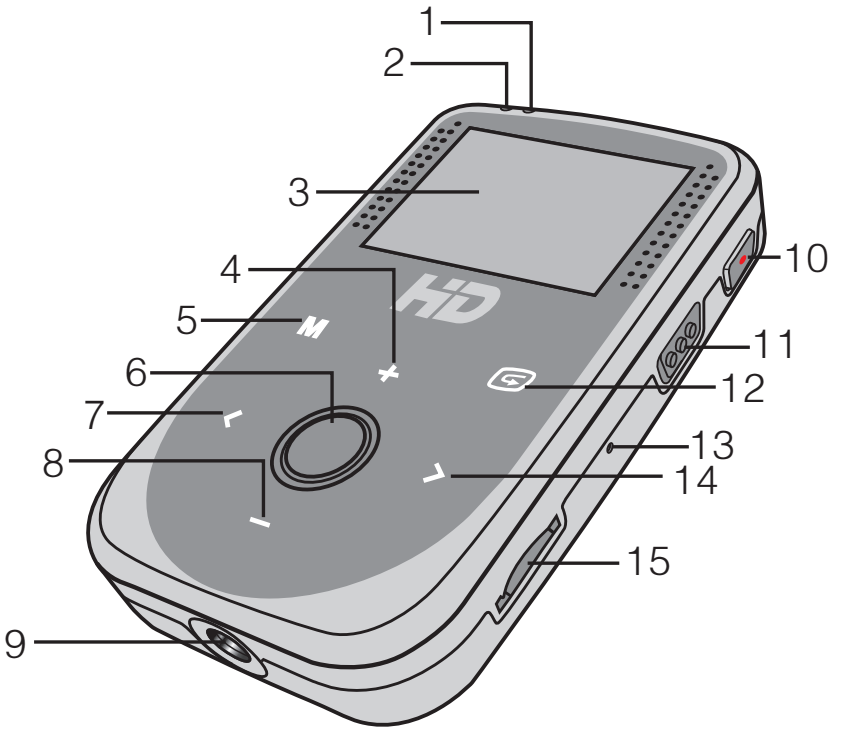
Do not litter! Please recycle them!

Product Features

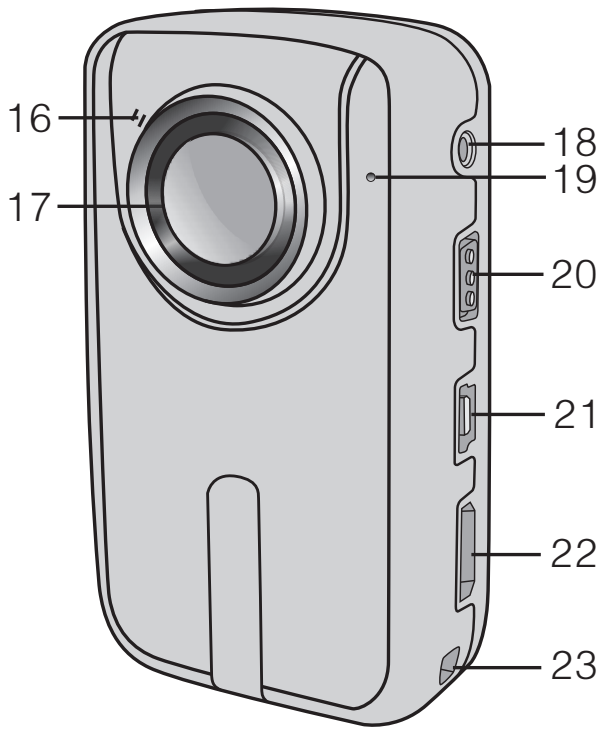
>170° large view angle and large aperture;
>5.0 mega high-definition camera, supporting 1080P/720P high-definition video recording;
>Photo shooting function, supporting a maximum resolution of 3200x2400;
>3X digital zoom function; Applicable for 720P models
>Self-timer function;
>Video loop coverage function;
>Voice recording function;
>Touch sensitive keypad, fashionable and easy to operate;
>TFT display screen easy to play and recall videos;
>Voice-activated video recording function, to deploy the recording details and only record the selected videos, supporting a longer standby time;
>Better image effects, video output modes :
1080P(1920x1080) 30fps/s, Applicable for 1080P models
720P (1280x720) 60f/s, Applicable for 1080P models
720P (1280x720) 30f/s, Applicable for 720P models
WVGA (848x480) 60f/s,
QVGA (320x240) 30f/s;
>Battery capacitiy detection and Micro SD card capacity availability detection;
>High-speed dynamic video recording function, supporting an instant response to bright and dark environments;
>Auto exposure, auto white balance, easy to operate;
>Delicate and stylish exterior design, applicable to various occasions;

>HDMI interface and AV output interface, to connect a high-definition monitor or TV to view files;
>Recording MOV videos, to be directly played by PC or uploaded onto video websites;
>Support 32GB Micro SD card(max);
>High-quality color fidelity, clearer and more realistic image;
>Key lock function, to prevent misoperations;
>You can use the attached remote control to control the video recording and photo shooting; the special code pairing function which matches a remote control only with the coded HD50 makes misoperations impossible.
>Recording MOV videos, to be directly played by PC or uploaded onto video websites;
>Auto standby power-saving function;
>Supporting fast forward and fast rewind, and skipping of contents in the next segment (when connecting with TFT screen player);
>Supporting time setting (RTC function) and time superposition function;
>Supporting USB 2.0;
>Built-in microphone, forming high-quality voice recording effect;
>Various sport accessories, truly realizing the video recording of sports;
>Good seismic resistance;
>Various shooting modes available: Single shooting, three photos continuous shooting, continuous shooting;
>Settings auto saving.

Product Structure



1. Status Indicator (green)
2. Power Indicator (red)
3. TFT Display Screen
4. Up
5. Menu
6. OK/Shutter/Lock
7. Left
8. Down
9. Screw-type Interface
10. Record
11. VOX Switch
12. Recall
13. Reset
14. Right
15. Micro SD Card Slot



16. Self-timer Indicator
17. Lens
18. AV Output Interface
19. Microphone
20. Power Switch
21. Mini USB Port
22. HDMI Interface
23. Lanyard Hole

Installation

1.Installation of Clip

HD50 can be either handheld or combined with the multifunctional clip. In the latter case, you can fix the clip to your clothes or other objects. Follow the steps below to install the clip:

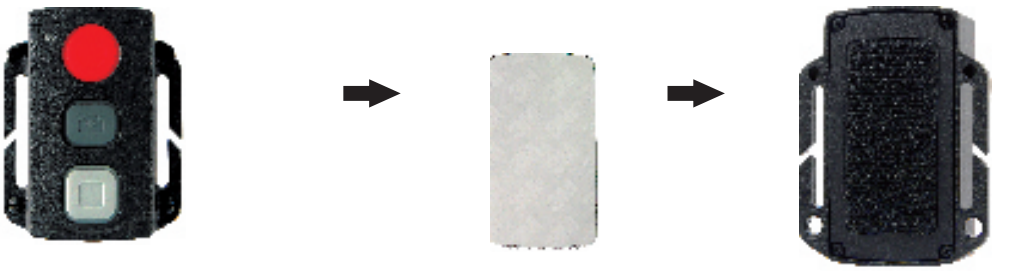
Clip

Main Body　　Clip　　Install the clip onto the main body

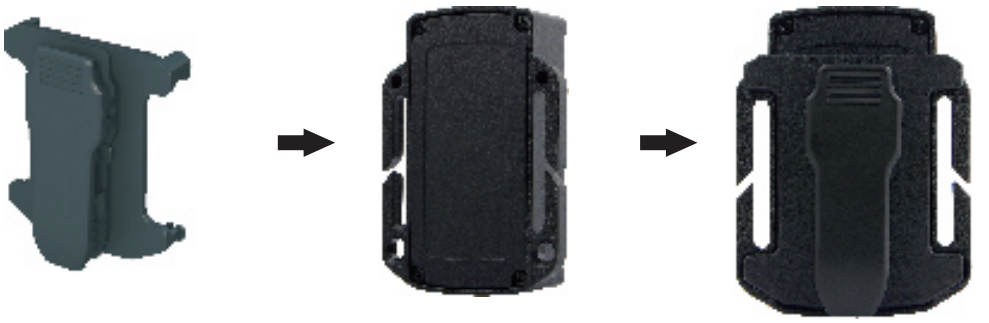
2.Installation of Remote Control

There is a separate remote control attached to HD50. Please install the remote control onto the correct position based on the accessories below:

(1). Velcro



(2). Clip



(3). Binding tape (optional)

Operating Instructions

Preparations before Use

(1)Charge HD50

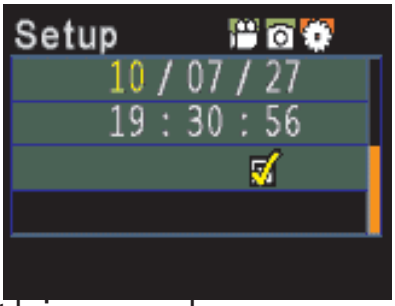
Before use, please check if there is enough battery power. In case of a low battery power, please charge HD50 via the power supply or USB cable. The power indicator will twinkle slowly in red in charging and remain red with the battery icon "" displayed on the TFT screen after charging.

(2)Format the Micro SD Card

Please select a high-speed Micro SD card only and format it on HD50 before recording any video or shooting any photo. If the Micro SD card has ever been used on other devices, please format it on HD 50 before any operation.

(3)Set the Date/Time

In preview mode, touch [M] to enter the selection interface, touch [>] to shift to the setup interface "", touch [-] to select the menu "Date/Time", and then press [OK/Shutter] to set the time.The yellow number indicates the current cursor position. If you



touch [<] or [>] to move the cursor and press [OK/Shutter] to select the current number, this number will turn red. Then you can touch [+] or [-] to change this number, move the cursor to "", and finally press [OK/Shutter].

HD50 Settings

In preview mode, touch [M] to enter the selection interface, touch [>] to shift to the setup interface " ", press [OK/Shutter] to set the selected menu, and then touch [M] to exit the menu.

Touch [+] and [-] to move the cursor up and down, touch [<] and [>] to move the cursor left and right, and then press [OK/Shutter] to confirm the status set for the current menu

a.Key tone: Turn on or turn off the key tone;

Note:
Voice of photo shooting and video recording cannot be turned off through this item. It only turns off the key operation voice and there is no switch to turn off voice of photo shooting and video recording in the machine system.

b.Time display: Please set before using; the machine will auto record the shooting date and time when shooting image and display on the bottom right corner of the file;

c.Loop coverage: The video/audio file will be auto saved in segment once every 15 minutes when setting " Loop Coverage"; and if it is not set, the video/audio file will be auto saved in segment once every 30 minutes.

Note:
The current actual segment file is determined by the file size set, but not determined by the true time, that is to say, the file will be segmented more than 15/30 minutes at a dark environment.

d.Auto standby: Select the auto standby time of 0, 2 minutes, 5 minutes or 10 minutes. In case of no any

mission and operation after selecting, the system will start timing and HD50 will turn off input and output to enter the standby mode at the end of the time set. If there is any operation in timing, the system will re-time.If the video recording or shutter is operated in the standby process, HD50 will be waked up. The default standby time is 5 minutes when selecting to restore the factory default;

e. TV Output Format: select the TV system NTSC or PAL, depending on your area.

Note: If you want to change the TV system when HD50 is connected to the TV, please unplug the AV cable and then reinsert it

f. Format: format the memory of the Micro SD card and HD50.

Note:
(a) Formatting will delete all files, including those are protected.
(b) If a Micro SD card is inserted into HD50, formatting will give preference to Micro SD card. Otherwise, HD50 will be formatted.

g. Factory Default: restore the parameter settings to factory default.

h. Language: set the system language as Simplified Chinese, English, or Traditional Chinese.

i. Light Source Frequency: select the light source frequency 50Hz or 60Hz, depending on your area, in order to avoid the TFT screen flickering in preview mode or in video recording.

HD50 Operations

1.Insert the Micro SD card.

2.Turn the power switch to “ON” to turn on HD50, and the red indicator will be lightened and HD50 will enter the preview mode.

Note:
(a) In case of low battery power, you will find the battery icon “ ” and the message “Low Power” on the TFT screen.
(b) If no Micro SD card is inserted, you will find the Micro SD card icon “ ” on the TFT screen

3.Video Recording:

(1)Manually Recording: turn on HD50 and turn the VOX switch to “OFF”.

In preview mode, press [Record] to start recording, and the red indicator will go out, the green indicator twinkle slowly, the TFT screen display the video recording icon, and the timer be started. In video recording, press [Record] to stop recording and the files will be saved as a “*.MOV”file.

In video recording, you can find the video recording icon and such parameters as video recording resolution, battery power, Micro SD card capacity available, video recording time, and focus on the TFT screen.

Adjust the focus: in video recording, touch [+] and [-] to adjust the focus.

Micro SD card capacity availability detection: you can find the Micro SD card capacity available on the TFT screen; “0%” means there is no memory space available on the Micro SD card.

Video recording resolution: in preview mode, touch [M] to enter the setup interface, select the menu “Image Resolution”, press [OK/Shutter] to enter the resolution setup interface, and touch [<] or [>] to select a resolution from 1080P(Applicable for 1080P models),720P, WVGA, and QVGA.

(2)Voice-activated Recording: turn on HD50 and turn the VOX switch to “ON”.

(a) When you turn on HD50, if the external sound goes beyond 65dB,HD50 will auto enter the video recording mode to start recording, the red indicator go out, and the green indicator twinkle slowly.

(b) If the external sound remains under 65dB for 2 minutes, HD50 will auto save the file and enter the preview mode.

(c)In preview mode, if the external sound goes beyond 65dB again, HD50 will auto enter the video recording mode to start recording again.

(d)To turn off HD50 in voice-activated video recording, please turn the VOX switch to “OFF” first so that HD50 will auto save the data.

Note:

(a) If the battery power is low in video recording, the system will auto save the current file and give the message “Low Power” until HD50 is turned off or auto turned off.

(b) If the memory space of the Micro SD card gets full in video recording, the system will auto save the current file, give the message “Insufficient Memory”, and go back to the preview mode.

(c) In a long video recording process, the system will auto save the data as a file in every 30 minutes.

(d) If you turn the VOX switch to “OFF” in voice-activated video recording, HD50 will auto save a file.

(e) Manually recorded files are named like this: FILE0001.MOV, FILE0002.MOV, FILE0003.MOV.

4.Photo Shooting:

You can set the image resolution before shooting photos.Touch [M] to enter the setup interface, touch [>] to move the cursor to "", select the menu "Image Resolution", and press [OK/Shutter] to enter the resolution setup menu. There are three resolution modes available for your selection:

- 3M: photo shooting resolution of 2048x1536;
- 5M: photo shooting resolution of 2560x1920;
- 8M: photo shooting resolution of 3200x2400.

(1) Manual Shooting:

In preview mode, press [Shutter] to shoot a photo with a "click" sound, and the red indicator will twinkle once.

(2) Self-timer:

Touch [M] to enter the setup interface, touch [>] to move the cursor to "", select the menu "Self-timer", and press [OK/Shutter] to set the delay time as 5s or 10s.

Touch [M] to exit the setup interface. Press [Shutter], and HD50 will start the timer and shoot a photo at the end of the delay time.

5.Voice Recording:

Touch [M] to enter the setup interface, select the menu"Capture Mode", press [OK/Shutter] to enter the selection interface, touch [<] or [>] to select "", press [OK/Shutter] to confirm your selection, and finally touch [M] to exit the setup interface.

Press [Record] to start recording, and the red indicator will go out, the green indicator twinkle

slowly, the TFT screen display the voice recording icon, and the timer be started.

6.File Recall:

You can view the audio files, video files and photo files on HD50. Touch [ ] to enter the recall selection interface and touch it again to exit the recall interface. Select the menu “AV File” to view the audio and video files or select the menu “Photo File” to view the photo files.

(1) AV File

Select the menu “AV Files” and press [OK/Shutter] to view the recorded audio or video files. Touch [-] to enter the thumbnail preview mode.

You can touch [M] to delete or protect them when viewing video or audio files.

- Delete: delete the current file.
- Delete All: delete all audio or video files under no protection.
- Protect: lock files to protect them; the icon “ ” will appear on the upper left corner of each protected file; repeat this operation to unprotect the protected files; no operation can delete the protected files except formatting.

(a) Audio File

Touch [<] or [>] to select an audio file and press [OK/Shutter] to play it. In playing, you can touch [+] and [-] to adjust the volume and touch [ ] to pause or play the file.

(b) Video File

When playing a video file, you can touch or press the following keys to execute operations:

- [+]: increase the volume;
- [-]: reduce the volume;
- [<]: fast rewind;
- [>]: fast forward;
- [ ]: touch it to pause playing and touch it again to resume playing;
- [OK/Shutter]: after touching [<] or [>], you can press this key to resume regular playing.

Note: Fast rewind can be set as twofold or fourfold

(2) Photo File

Enter the photo file recall interface, touch [-] to preview the photo file thumbnails, touch the direction keys to select a file, and then press [OK/Shutter] to view it.

When viewing a photo file, you can touch the following keys to execute operations:

[+]: zoom in the current photo;

[-]: preview the photo in file thumbnails or zoom out the current photo;

[<]: select the left photo, or touch it to move the photo up or left in zoom-in mode;

[>]: select the right photo, or touch it to move the photo down or right in zoom-in mode;

[ ]: touch it to exit the photo view interface;

[M]: touch it to execute the operations below:

- Delete: delete the current file.
- Delete All: delete all photo files under no protection.
- Protect: lock files to protect them; the icon " " will appear on the upper left corner of each protected file; repeat this operation to unprotect the protected files; no operation can delete the protected files except formatting.
- Auto Play: auto play the photo files in the folder at an interval of 5s.

- DPOF: when viewing a photo file, if you touch [M] to enter the setup interface and select the menu “DPOF”, the icon “ ” will appear on the upper left corner of this file.

  About DPOF

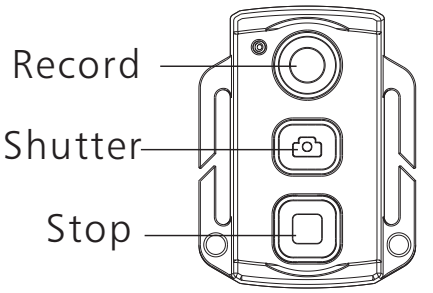
  As a standard to record the print orders sent by the Micro SD card, DPOF (Digital Print Order Format) is applicable to the photos shot by digital cameras. You can designate the photos to be printed and the number of their copies. The following operations can be executed if your digital camera is DPOF compatible:

- Insert the Micro SD card into a DPOF compatible printer to output the photos as ordered.
- The printer compatible with your camera can follow the DPOF orders to print the photos.

Note
(1) The DPOF printing requires a Micro SD card with preset DPOF information. It will fail if you simply select the photos from the Micro SD card and try to print them.
(2) Some DPOF compatible printers and digital photo developing shops may fail to print the photos based on the specific settings. If this is the case with your printer, please refer to the User Manual attached to it. In another case, please check the DPOF compatibility with the digital photo developing shop.
(3) If the DPOF information of the Micro SD card has been set by another camera, please do not insert this card into HD50 to reset the DPOF information, or the DPOF information may be invalid or covered. Sometimes, special photo types make it impossible to set the DPOF information.

7.Remote Control:

You can use the attached remote control to control the video recording and photo shooting. The red indicator on the remote control will twinkle once when you press any of the following keys:



Remote control and HD50 shall be used together. If they do not match, first perform the code matching as the below steps:

1.Turn off HD50, press and hold [OK/Shutter], turn the power switch to "ON", and then release [OK/Shutter] when HD50 is turned on.

2.Press both [Record] and [Stop] on the remote control within 3s to finish the remote control code pairing process.

Note:
(1) The remote control range is about 5 meters.
(2) Under shutdown state, press and hold "OK/Shutter" button, set the "Power" button to "ON" and release the button after start-up. Then, code match is finished. .
(3) If code pairing is successful, HD50 will act accordingly when you press any of the keys on the remote control. If code pairing fails, please repeat the above code pairing process.

8.Key Lock:

Lock keys to prevent misoperations. In standby state or video recording, you can long press [OK/Shutter] for 4s to lock keys. Then, when you touch any key, the background light will twinkle once to remind you the keys are locked and no operation is accepted.By long pressing [OK/Shutter] for 4s again, you can unlock the locked keys.

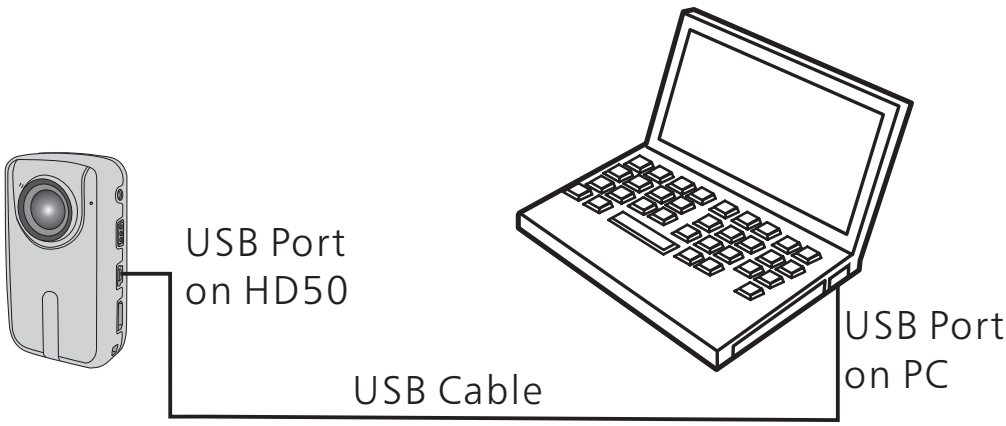
9.Reset:

If the system fails to respond or there is any exceptional operation, please press [Reset] lightly to reset the system with a needlelike object .

File Storage and Play

(1) USB Cable

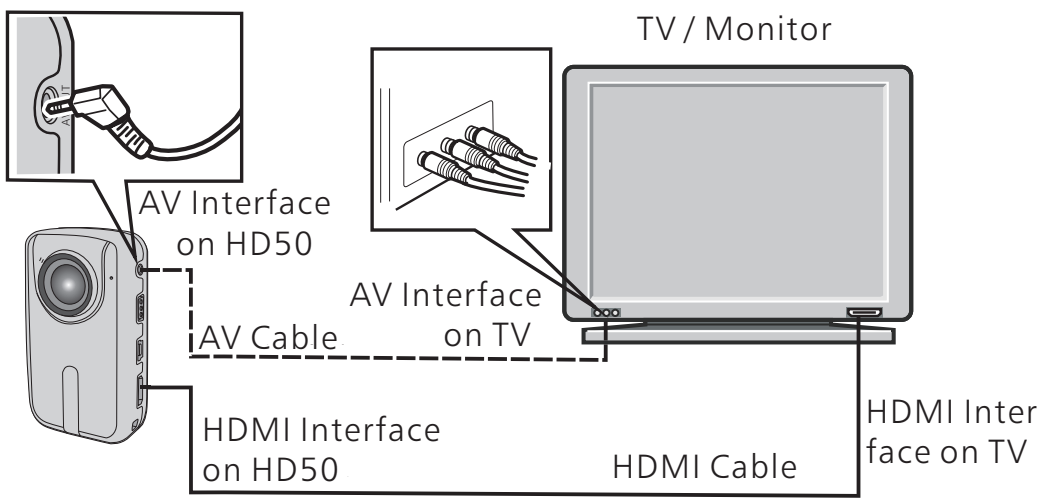
You can copy or cut the recorded video files to your computer via the USB cable, or remove the Micro SD card and insert it into a card reader to read the video data. Then, you can select our software from the attached CD or such recommended softwares as Media Player and KM Player to play the videos.



Note:
(1) Please turn off the HD50 before inserting or unplugging the USB cable.
(2) Turn the power switch to “OFF” before charging HD50. The red indicator will twinkle slowly in charging.
(3) You can directly copy or cut the recorded files to your computer when the power switch is turned to “ON”.

(2) HDMI Cable and AV Cable

You can also use the HDMI cable or AV cable to connect HD50 to a TV or monitor with HDMI interface, in order to play the recorded files .



Note:

(1) After connecting HD50 to the monitor via the HDMI cable, please select the input source for the monitor to display the data from HD50.

(2) If you select the AV cable, please connect each of its terminals to the relevant TV or monitor terminal in the same color.

(3) Please adjust the parameters of the monitor to optimize the image effect.

ADAPTER

This product always conforms to the authenticated AC adapter. The adapter should be marked one of the following:

UL Mark
American power supply authentication

C-TICK
Australia power supply authentication

CE Mark
European Union power supply authentication

PSE Mark
Japan power supply authentication

CCC Mark
China power supply authentication

BS Mark
British power supply authentication

GS Mark
German power supply authentication

NOTICE:
When using the power adapter, make sure the rating voltage on it is compatible with that of the device to avoid potential damages resulting from incorrect usage of power supply.

PACKING CONTENTS

Clip for main unit

Remote Control

Clip for Remote Control

Adapter

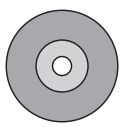
AV Cable

USB Cable

Pouch

Velcro for bracket

Chain for main unit



CD

Micro SD card

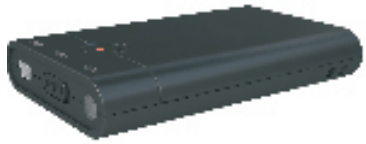
__Optional__

Note:
(1) The actual items may by different from the pictures here. Package is subject to change without further notice.
(2) The actual accessories may vary with configuration listed here, depending on the specifications of the product you purchase.

OPTIONAL ACCESSORIES

1. Portable Power Supply (850mAH)

2. Portable Power Supply (2500mAH)



3. Car Sucker Bracket

4. Accessory for Installation onto Bicycle

5. Accessory for Flat Installation

6. Accessory for Installation onto Helmet Side

7. Accessory for Installation onto Helmet Top

8. Car Bracket

9. HDMI Cable

The above accessories are optional. If you need them, please contact our distributors.

SPECIFICATIONS

View Angle	170°
Remote Control Rang	5 Meters
Photo Shooting	Resolution Available: 3M, 5M, or 8M JPEG
Pixel	5. 0 million color CMOS
Video Recording Duration	About 4h
Voice Recording Duration	About 5h
Standby Time(sound trigger)	200h
File Storage	30min per Segment
Video Function and Format	Video decode use H. 264 compress mode, recording for MOV format 1080P ***(Applicable for 1080P models)***, 720P, WVGA,QVGA)
Memory medium	Micro SD card
Charge Time	4h(approx.)
SD Capability	Max 32GB Micro SD Card
Voice Recording	WAV
Battery Capacity	1400mAH/3.7V
Consumption Current	350mA/3.7V(Max.)
USB Jack	USB2.0
Store Temperature	-20℃-60℃
Operation Temperature	-10℃-50℃
Operation Humidity	15-85%RH
Operation System	Windows 98SE/2000/Me/XP/Vista
Weight	81g
Dimension	85x50x23mm

NOTICE:
Specifications are subject to minor change with upgrade and update. Please base on real object.

FCC NOTE

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:(1)this device may not cause harmful interference, (2) this device must accept any interference received, including interference that may cause undesired operation.

The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

For a Class B digital device or peripheral, the instructions furnished the user shall include the following or similar statement, placed in a prominent location in the text of the manual:

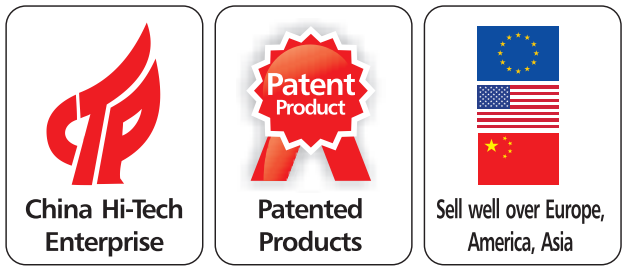
NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

-- Reorient or relocate the receiving antenna

-- Increase the separation between the equipment and receiver.

-- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

-- Consult the dealer or an experienced radio/TV technician for help.



Please read this user manual carefully and thoroughly before any attempt to install and operate this product and re-tain it for your future reference.